Complete Summary

GUIDELINE TITLE

ACR Appropriateness Criteria™ for dementia.

BIBLIOGRAPHIC SOURCE(S)

Braffman B, Drayer BP, Anderson RE, Davis PC, Deck MD, Hasso AN, Johnson BA, Masaryk T, Pomeranz SJ, Seidenwurm D, Tanenbaum L, Masdeu JC. Dementia. American College of Radiology. ACR Appropriateness Criteria. Radiology 2000 Jun;215(Suppl):525-33. [31 references]

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

Dementia

GUIDELINE CATEGORY

Diagnosis

CLINICAL SPECIALTY

Family Practice
Geriatrics
Internal Medicine
Neurology
Radiology

INTENDED USERS

Health Plans
Hospitals
Managed Care Organizations
Physicians
Utilization Management

GUIDELINE OBJECTIVE(S)

To evaluate the appropriateness of initial radiologic examinations for dementia

TARGET POPULATION

Patients with dementia

INTERVENTIONS AND PRACTICES CONSIDERED

1. Magnetic resonance imaging:
    - Plain
    - With gadolinium
    - Functional magnetic resonance imaging
2. Magnetic resonance spectroscopy
3. Computed tomography:
    - Plain
    - Intravenous contrast
4. Positron emission tomography
5. Single-photon emission computed tomography

MAJOR OUTCOMES CONSIDERED

Utility of radiologic examinations in differential diagnosis

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

The guideline developer performed literature searches of recent peer-reviewed medical journals, primarily using the National Library of Medicine's MEDLINE database. The developer identified and collected the major applicable articles.

NUMBER OF SOURCE DOCUMENTS

The total number of source documents identified as the result of the literature search is not known.

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Expert Consensus (Delphi Method)
Weighting According to a Rating Scheme (Scheme Not Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

METHODS USED TO ANALYZE THE EVIDENCE

Systematic Review with Evidence Tables

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

One or two topic leaders within a panel assume the responsibility of developing an evidence table for each clinical condition, based on analysis of the current literature. These tables serve as a basis for developing a narrative specific to each clinical condition.

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus (Delphi)

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

Since data available from existing scientific studies are usually insufficient for meta-analysis, broad-based consensus techniques are needed to reach agreement in the formulation of the Appropriateness Criteria. Serial surveys are conducted by distributing questionnaires to consolidate expert opinions within each panel. These questionnaires are distributed to the participants along with the evidence table and narrative as developed by the topic leader(s). Questionnaires are completed by the participants in their own professional setting without influence of the other members. Voting is conducted using a scoring system from 1-9, indicating the least to the most appropriate imaging examination or therapeutic procedure. The survey results are collected, tabulated in anonymous fashion, and redistributed after each round. A maximum of three rounds is conducted and opinions are unified to the highest degree possible. Eighty (80) percent agreement is considered a consensus. If consensus cannot be reached by this method, the panel is convened and group consensus techniques are utilized. The strengths and weaknesses of each test or procedure are discussed and consensus reached whenever possible.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Criteria developed by the Expert Panels are reviewed by the American College of Radiology (ACR) Committee on Appropriateness Criteria and the Chair of the ACR Board of Chancellors.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

ACR Appropriateness Criteria™

Clinical Condition: Dementia

Variant 1: Probable Alzheimer's disease.

Radiologic Exam Procedure	Appropriateness Rating	Comments
Magnetic resonance		
Magnetic resonance imaging	8	
Magnetic resonance imaging and gadolinium	4	
Magnetic resonance spectroscopy	No Consensus	New applications being developed.
Functional magnetic resonance imaging	No Consensus	New applications being developed.
Computed tomography		
Plain computed tomography	6	If magnetic resonance imaging is not available or patient is uncooperative.
Intravenous contrast computed tomography	4	
Nuclear medicine		
Positron emission tomography	5	
Single-photon emission computed tomography	4	Reserve for difficult cases.

Appropriateness Criteria Scale 1 2 3 4 5 6 7 8 9 1=Least appropriate 9=Most appropriate

Clinical Condition: Dementia

Variant 2: Possible Alzheimer's disease.

Radiologic Exam Procedure	Appropriateness Rating	Comments
Magnetic resonance		
Magnetic resonance imaging	8	
Magnetic resonance imaging and gadolinium	4	
Magnetic resonance spectroscopy	No Consensus	New applications being developed.
Functional magnetic resonance imaging	No Consensus	New applications being developed.
Computed tomography		
Plain computed tomography	6	If magnetic resonance imaging is not available or patient is uncooperative.
Intravenous contrast computed tomography	4	
Nuclear medicine		
Positron emission tomography	6	
Single-photon emission computed tomography	No Consensus	Reserve for difficult cases.
Appropriateness Criteria Scale 1 2 3 4 5 6 7 8 9 1=Least appropriate 9=Most appropriate		

Clinical Condition: Dementia

Variant 3: Suspected vascular dementia or mixed vascular dementia and Alzheimer's disease.

Radiologic Exam Procedure	Appropriateness Rating	Comments
Magnetic resonance		
Magnetic resonance imaging	8	
Magnetic resonance imaging and gadolinium	4	
Magnetic resonance spectroscopy	No Consensus	New applications being developed.
Functional magnetic resonance imaging	No Consensus	New applications being developed.
Computed tomography		
Plain computed tomography	6	If magnetic resonance imaging is not available or patient is uncooperative.
Intravenous contrast computed tomography	4	
Nuclear medicine		
Positron emission tomography	6	
Single-photon emission computed tomography	No Consensus	New applications being developed.
Appropriateness Criteria Scale 1 2 3 4 5 6 7 8 9 1=Least appropriate 9=Most appropriate		

Clinical Condition: Dementia

Variant 4: Suspected Pick's disease.

Radiologic Exam Procedure	Appropriateness Rating	Comments
Magnetic resonance		
Magnetic resonance imaging	8	

Magnetic resonance imaging and gadolinium	4	
Magnetic resonance spectroscopy	No Consensus	New applications being developed.
Functional magnetic resonance imaging	No Consensus	New applications being developed.
Computed tomography		
Plain computed tomography	6	If magnetic resonance imaging is not available or patient is uncooperative.
Intravenous contrast computed tomography	4	
Nuclear medicine		
Positron emission tomography	6	
Single-photon emission computed tomography	No Consensus	New applications being developed.
Appropriateness Criteria Scale 1 2 3 4 5 6 7 8 9 1=Least appropriate 9=Most appropriate		

Clinical Condition: Dementia

Variant 5: Suspected Creutzfeldt-Jakob disease.

Radiologic Exam Procedure	Appropriateness Rating	Comments
Magnetic resonance		
Magnetic resonance imaging	8	
Magnetic resonance imaging and gadolinium	4	
Magnetic resonance spectroscopy	No Consensus	New applications being developed.
Functional magnetic resonance imaging	No Consensus	New applications being developed.
Computed tomography		

Plain computed tomography	6	If magnetic resonance imaging is not available or patient is uncooperative.
Intravenous contrast computed tomography	2	Unless magnetic resonance imaging is not available.
Nuclear medicine		
Positron emission tomography	No Consensus	New applications being developed.
Single-photon emission computed tomography	No Consensus	New applications being developed.
Appropriateness Criteria Scale 1 2 3 4 5 6 7 8 9 1=Least appropriate 9=Most appropriate		

Clinical Condition: Dementia

Variant 6: Suspected normal pressure hydrocephalus.

Radiologic Exam Procedure	Appropriateness Rating	Comments
Magnetic resonance		
Magnetic resonance imaging	8	
Cine Magnetic resonance imaging	6	
Magnetic resonance imaging and gadolinium	4	If infection or sarcoid is suspected.
Magnetic resonance spectroscopy	No Consensus	New applications being developed.
Nuclear medicine		
Radionuclide cisternography	6	
Computed tomography		
Plain computed tomography	6	If magnetic resonance imaging is not available or patient is uncooperative.
Intravenous contrast computed tomography	4	

Appropriateness Criteria Scale 1 2 3 4 5 6 7 8 9 1=Least appropriate 9=Most appropriate

Clinical Condition: Dementia

Variant 7: Atypical dementia.

Radiologic Exam Procedure	Appropriateness Rating	Comments
Magnetic resonance		
Magnetic resonance imaging	8	
Magnetic resonance imaging and gadolinium	5	
Magnetic resonance spectroscopy	No Consensus	New applications being developed.
Functional magnetic resonance imaging	No Consensus	New applications being developed.
Computed tomography		
Plain computed tomography	6	If magnetic resonance imaging is not available or patient is uncooperative.
Intravenous contrast computed tomography	4	
Nuclear medicine		
Positron emission tomography	6	
Single-photon emission computed tomography	No Consensus	New applications being developed.

Appropriateness Criteria Scale 1 2 3 4 5 6 7 8 9 1=Least appropriate 9=Most appropriate

Clinical Condition: Dementia

Variant 8: Parkinson's disease.

Radiologic Exam Procedure	Appropriateness Rating	Comments
Magnetic resonance		
Magnetic resonance imaging	8	
Magnetic resonance imaging and gadolinium	4	
Magnetic resonance spectroscopy	No Consensus	New applications being developed.
Functional magnetic resonance imaging	No Consensus	New applications being developed.
Computed tomography		
Plain computed tomography	6	If magnetic resonance imaging is not available or patient is uncooperative.
Intravenous contrast computed tomography	4	
Nuclear medicine		
Positron emission tomography	No Consensus	New applications being developed.
Single-photon emission computed tomography	No Consensus	New applications being developed.
Appropriateness Criteria Scale 1 2 3 4 5 6 7 8 9 1=Least appropriate 9=Most appropriate		

Summary

Alzheimer's disease is the most frequent type of dementia in the United States and most European elderly, comprising about 50% to 80% of subjects in various clinicopathological series. The National Institute of Neurological and Communicative Disorders and Stroke (NINCDS) and the Alzheimer's Disease and Related Disorders Association (ADRDA) established the criteria for the definitive, probable, and possible diagnosis of Alzheimer's disease. Criteria for a definitive diagnosis are histologic evidence of Alzheimer's disease obtained from a biopsy or autopsy and the clinical criteria for probable Alzheimer's disease. Criteria for a diagnosis of probable Alzheimer's disease include:

- the insidious onset and progressive worsening of dementia;

- prominent difficulty with memory (especially retention and retrieval of new material);
- onset after age 60;
- no focal signs or gait difficulties on neurologic examination, especially early in the course; and
- exclusion of other causes of dementia, either due to systemic disorders or other intracranial disorders.

To exclude other intracranial disorders that might cause dementia (including stroke, intra-axial or extra-axial tumors, subdural hematomas, hydrocephalus, Creutzfeldt-Jakob disease), neuroimaging (magnetic resonance imaging or computed tomography) should be performed. If available, magnetic resonance imaging is preferable to computed tomography because of its greater sensitivity in detecting most intracranial pathologies. Eighty percent to eighty-five percent of patients who meet the criteria for probable Alzheimer's disease have histologic evidence of Alzheimer's disease.

Criteria for a diagnosis of possible Alzheimer's disease include:

- variations in the onset, presentation, or clinical course of typical Alzheimer's disease; or
- the presence of a second systemic or intracranial disorder sufficient to produce dementia, but which is not considered to be the cause of the dementia.

In either of these two scenarios, magnetic resonance imaging (computed tomography, if unavailable) should be performed to determine whether the patient has other intracranial pathologies. Patients with possible Alzheimer's disease have a greater incidence of other significant intracranial pathologies detected on neuroimaging studies than patients with probable Alzheimer's disease.

Therefore, the primary role of neuroimaging in the workup of patients with probable or possible Alzheimer's disease is to exclude other significant intracranial abnormalities. However, recent investigations document diagnostic neuroimaging features in Alzheimer's disease, suggesting an additional role of neuroimaging. Positron emission tomography studies with fluorine-18-fluorodeoxyglucose show characteristic reductions of regional glucose metabolic rates in patients with probable and definitive Alzheimer's disease in the parietal, temporal, and posterior cingulate regions. Positron emission tomography accurately discriminates Alzheimer's disease patients from normal subjects with a sensitivity of 96% and specificity of 100%.

Magnetic resonance -based volumetric measurements of the hippocampal formation are significantly smaller in patients with mild Alzheimer's disease compared with controls and compared with patients with other forms of dementia. This magnetic resonance finding correlates with a neuropathologic hallmark of Alzheimer's disease, which is focal atrophy of the hippocampal formation. Magnetic resonance imaging volumetric calculations permit differentiation of controls from patients with Alzheimer's disease accurately in 85% to 100% of cases. Although it is not as accurate as magnetic resonance imaging, computed

tomography also permits detection of hippocampal atrophy in Alzheimer's disease patients.

Regional cerebral blood flow determined using single-photon emission computed tomography imaging with TC 99m hexamethyl propylene amine oxime (HMPAO) shows bilateral temporoparietal and/or hippocampal hypoperfusion in Alzheimer's disease. Whether brain single-photon emission computed tomography contributes substantially to diagnostic accuracy after a careful clinical examination using current diagnostic criteria is controversial. Hydrogen-1 magnetic resonance spectroscopy may permit identification of mild to moderate Alzheimer's disease with a specificity and sensitivity that suggest the potential for clinical usefulness. Additional studies are needed to confirm these preliminary results. Functional magnetic resonance is an investigational tool at this time.

Of these neuroimaging tests, magnetic resonance volumetric analysis of the hippocampal formation and positron emission tomography assessment of regional glucose metabolism are the most diagnostic of Alzheimer's disease. Determining the specific clinical applications of either of these studies in patients with probable or possible Alzheimer's disease and atypical dementias awaits additional investigations. In patients with a diagnosis of probable Alzheimer's disease, either of these neuroimaging studies may permit the accuracy to increase from the 80% to 85% range to the 90% to 100% range. In patients with possible Alzheimer's disease or other atypical dementias, these neuroimaging studies may permit a more accurate diagnosis. Positron emission tomography studies, and possibly functional magnetic resonance imaging, likely will play an important future role in the evaluation of new therapeutic drug strategies that will prevent or arrest the cognitive deficits of Alzheimer's disease. Additional imaging investigations are encouraged.

Vascular dementia, caused by one or more small or large brain infarcts, constitutes about 10% of patients with dementia. Vascular dementia can be prevented or arrested by measures that prevent recurrent infarction (i.e., control of hypertension, antiplatelet therapy). Cognition may even improve after these factors are controlled, suggesting that at least a portion of dementia is caused by reversible physiologic changes and not infarction. Therefore, clinical and radiologic tests that aid in distinguishing vascular dementia from less treatable forms of dementia may be beneficial.

A diagnosis of vascular dementia is supported by the following findings:

- the sudden onset of dysfunction in one or more cognitive domains;
- a stepwise deteriorating course;
- focal neurologic signs, including weakness of an extremity, exaggeration of deep tendon reflexes, extensor plantar responses, and gait abnormalities;
- evidence of stroke risk factors and systemic vascular disease; and
- evidence of previous strokes.

The role of neuroimaging, therefore, is to document the presence or absence of strokes. Although computed tomography remains a valuable study to detect the presence or absence of infarctions in patients with dementia, histopathologically verified cases of vascular dementia with normal computed tomography studies

have been reported. Thus, if available, magnetic resonance imaging is preferable to computed tomography.

Differentiation of vascular disease from either Alzheimer's disease with superimposed cerebrovascular disease or mixed Alzheimer's disease and vascular disease is especially difficult. When vascular disease is diagnosed on the basis of the above criteria, this pathologic diagnosis alone is confirmed in about 25% of cases; more commonly, a mixed disorder with neuropathologic changes of both Alzheimer's disease and vascular disease is found. On neuroimaging studies, extensive infarctions (cortical, or lacunar, or both), and white matter changes (hyperintense on T2-weighted magnetic resonance images or hypodense on computed tomography) in a patient with dementia favor a clinical diagnosis of vascular disease or mixed vascular disease and Alzheimer's disease over Alzheimer's disease. The absence or mild extent of these changes in a patient with dementia argues against a diagnosis of vascular disease. However, among patients with significant cerebrovascular risk factors (i.e., stroke, transient ischemic attack, hypertension), both those with and without dementia have lobar and lacunar infarctions, and extensive white matter changes on magnetic resonance or computed tomography. Neither the presence nor extent of infarctions or white matter lesions distinguish demented from nondemented patients.

Positron emission tomography with fluorine-18-fluorodeoxyglucose in vascular disease shows multiple focal metabolic defects. Differentiation between Alzheimer's disease and vascular disease was much better achieved by positron emission tomography than single-photon emission computed tomography. Single-photon emission computed tomography is of little value in differentiating Alzheimer's disease from vascular disease. Magnetic resonance spectroscopy and functional magnetic resonance imaging are investigational and, to date, do not appear to clinically help establish the diagnosis of vascular disease or mixed vascular disease and Alzheimer's disease.

Pick's disease is a primary dementing illness like Alzheimer's disease, but it is far less common than Alzheimer's disease. The cognitive deficits may be similar in Alzheimer's disease and Pick's disease, although abnormal behavior and difficulty with language may be more common in patients with Pick's disease than memory disturbance. Magnetic resonance imaging shows the characteristic gross neuropathologic feature, i.e., dramatic focal lobar atrophy affecting one or more lobes, most commonly the frontal and temporal lobes. Magnetic resonance imaging also shows a hyperintense signal on the long TR sequence of the cortex and adjacent white matter of the affected lobes, thought to be secondary to the histologic changes of Pick bodies, neuronal loss, loss of myelin, and gliosis. Positron emission tomography studies assessing regional glucose metabolism with fluorine-18-fluorodeoxyglucose show the metabolic disturbance most prominent in the frontal and temporal lobes. Single-photon emission computed tomography studies assessing regional cerebral perfusion with TC 99m hexamethyl propylene amine oxime show frontal hypoperfusion. Magnetic resonance spectroscopy and functional magnetic resonance imaging are investigational and, to date, do not appear to clinically help establish the diagnosis of Pick's disease.

The definitive diagnosis of Creutzfeldt-Jakob disease is based on histopathologic findings. During life a presumptive diagnosis is made on the basis of clinical signs,

including a rapidly progressive dementia associated with upper motor neuron dysfunction, myoclonus, characteristic electroencephalogram, and neuroimaging findings. Although some variability exists, the most common magnetic resonance imaging abnormality, other than progressive atrophy, is hyperintense signal on long TR images in gray matter structures, usually in the basal ganglia or thalami, and less commonly in the cortical gray matter.

A recent case report showed marked cerebral hypometabolism on fluorine-18-fluorodeoxyglucose positron emission tomography study in the early stages of Creutzfeldt-Jakob disease, when no parenchymal abnormalities were present on magnetic resonance. Similarly, focal hypoperfusions were detected with single-photon emission computed tomography using N-isopropyl-(iodine-123) p-iodoamphetamine (123I-IMP) before computed tomography or magnetic resonance imaging showed any abnormalities. However, it may be difficult to differentiate Creutzfeldt-Jakob disease from Alzheimer's disease by positron emission tomography or single-photon emission computed tomography. Investigation performed to date suggests that changes in metabolites detectable by proton magnetic resonance spectroscopy are not an early feature of Creutzfeldt-Jakob disease.

Normal pressure hydrocephalus is characterized by the clinical triad of dementia, gait disturbance, and urinary incontinence. Other diagnostic features include normal cerebrospinal fluid pressure at lumbar puncture, communicating hydrocephalus documented on magnetic resonance imaging or computed tomography, and ventricular influx but no passage of isotope over the convexities on radionuclide cisternography.

Because the dementia and other symptoms can be reversible with shunting, and because patients with normal pressure hydrocephalus who are not shunted may progress symptomatically, distinction between responders and nonresponders is important. Several clinical, laboratory, and imaging signs may improve distinction between responders and nonresponders to shunting. Clinical features that favor shunt responsiveness include predominance of gait disturbance, mild to moderate degree of dementia, and rapid clinical progression of urinary incontinence. Magnetic resonance imaging or computed tomography findings include at least moderate ventriculomegaly (with rounded frontal horns and marked enlargement of the temporal horns and third ventricle), and absence of or only mild cortical atrophy. Increased cerebrospinal fluid flow void through the cerebral aqueduct on magnetic resonance imaging appears to correlate with a good response to shunt surgery. Cine magnetic resonance with inflow technique showing hyperdynamic aqueductal cerebrospinal fluid may also help in identifying shunt-responsive normal pressure hydrocephalus patients. Single-photon emission computed tomography cisternography permits more accurate localization of radionuclide activity than planar cisternography, which partially superimposed different cerebrospinal fluid compartments. One study using quantitative radionuclide cisternography using single-photon emission computed tomography found that patients with a higher relative count value in the lateral and third ventricles were predictive for responding to shunt surgery.

Dementia is more common in patients with Parkinson's disease than in age-matched controls. The dementia that occurs in Parkinson's disease clinically and pathologically appears to be Alzheimer's disease. As expected, positron emission

tomography studies with fluorine-18-fluorodeoxyglucose and single-photon emission computed tomography imaging with TC 99m hexamethyl propylene amine oxime in Parkinson's disease patients with dementia resemble the findings in patients with isolated Alzheimer's disease. Positron emission tomography imaging with other agents, such as the dopamine analogue 6-[18F] fluoro-L-DOPA, may also be useful in Parkinson's disease patients.

In conclusion, dementia is a major cause of disability and death in developed countries. The impact of a demented patient on his or her family is substantial. Neuroimaging studies play a critical role in the evaluation of dementia to rule out structural causes that may be reversible and to contribute to the diagnosis of specific types of dementia.

CLINICAL ALGORITHM(S)

Algorithms were not developed from criteria guidelines.

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The recommendations are based on analysis of the current literature and expert panel consensus.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Appropriate selection of radiographic exam for the diagnosis of dementia. Accurate diagnosis of the specific type of dementia is important. With reversible or arrestable dementias, accurate diagnosis permits the appropriate treatment to be instituted. With irreversible, progressive dementias, accurate diagnosis enables the clinician to provide anticipatory guidance to the patient and family, to more accurately prognosticate, to facilitate legal and financial planning, and to assist with providing access to community resources.

POTENTIAL HARMS

Not stated

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

An American College of Radiology (ACR) Committee on Appropriateness Criteria and its expert panels have developed criteria for determining appropriate imaging examinations for diagnosis and treatment of specified medical condition(s). These criteria are intended to guide radiologists, radiation oncologists and referring physicians in making decisions regarding radiologic imaging and treatment.

Generally, the complexity and severity of a patient's clinical condition should dictate the selection of appropriate imaging procedures or treatments. Only those exams generally used for evaluation of the patient's condition are ranked. Other imaging studies necessary to evaluate other co-existent diseases or other medical consequences of this condition are not considered in this document. The availability of equipment or personnel may influence the selection of appropriate imaging procedures or treatments. Imaging techniques classified as investigational by the U.S. Food and Drug Administration (FDA) have not been considered in developing these criteria; however, study of new equipment and applications should be encouraged. The ultimate decision regarding the appropriateness of any specific radiologic examination or treatment must be made by the referring physician and radiologist in light of all the circumstances presented in an individual examination.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better
Living with Illness

IOM DOMAIN

Effectiveness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

Braffman B, Drayer BP, Anderson RE, Davis PC, Deck MD, Hasso AN, Johnson BA, Masaryk T, Pomeranz SJ, Seidenwurm D, Tanenbaum L, Masdeu JC. Dementia. American College of Radiology. ACR Appropriateness Criteria. Radiology 2000 Jun;215(Suppl):525-33. [31 references]

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

1996 (revised 1999)

GUIDELINE DEVELOPER(S)

American College of Radiology - Medical Specialty Society

SOURCE(S) OF FUNDING

The American College of Radiology (ACR) provided the funding and the resources for these ACR Appropriateness Criteria™.

GUIDELINE COMMITTEE

ACR Appropriateness Criteria™ Committee, Expert Panel on Neurologic Imaging

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Names of Panel Members: Thomas Masaryk, MD; Burton P. Drayer, MD; Robert E. Anderson, MD; Bruce Braffman, MD; Patricia C. Davis, MD; Michael D. F. Deck, MD; Anton N. Hasso, MD; Blake A. Johnson, MD; Stephen J. Pomeranz, MD; David Seidenwurm, MD; Lawrence Tanenbaum, MD; Joseph C. Masdeu, MD, PhD

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

This is the current release of the guideline. It is a revision of a previously issued version (Appropriateness criteria for dementia. Reston [VA]: American College of Radiology (ACR); 1996. 9 p. [ACR Appropriateness Criteria™]).

The ACR Appropriateness Criteria™ are reviewed after five years, if not sooner, depending upon introduction of new and highly significant scientific evidence. The next review date for this topic is 2004.

GUIDELINE AVAILABILITY

Electronic copies: Available from the American College of Radiology (ACR) Web site.

Print copies: Available from ACR, 1891 Preston White Drive, Reston, VA 20191. Telephone: (703) 648-8900.

AVAILABILITY OF COMPANION DOCUMENTS

None available

PATIENT RESOURCES

None available

NGC STATUS

This summary was completed by ECRI on July 31, 2001. The information was verified by the guideline developer as of August 24, 2001.

COPYRIGHT STATEMENT

Date Modified: 1/3/2005